

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 89-172

NPDES NO. CA0027723

WASTE DISCHARGE REQUIREMENTS FOR:

TIME OIL COMPANY
PETROLEUM PRODUCTS STORAGE TERMINAL
RICHMOND, CONTRA COSTA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereafter called the Board) finds that:

1. Time Oil Company, (hereinafter called the discharger) submitted an application dated July 19, 1984 and amended it on November 10, 1988 and June 19, 1989 for a permit to discharge waste under the National Pollutant Discharge Elimination System (NPDES).
2. The discharger is a storage and distribution terminal for petroleum products.
3. The discharge consists of a yearly average of 200,000 gallons of contaminated stormwater runoff from the tank farms. This wastewater flows through a drainage system into an oil-water separator and then is discharged into Santa Fe Channel, a tributary to the Richmond Inner Harbor and San Francisco Bay, all waters of the United States.
4. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on December 17, 1986, and the State Water Resources Control Board approved it on May 21, 1987. The provisions of this permit are consistent with the revised Basin Plan.
5. The beneficial uses of Santa Fe Channel, the Richmond Inner Harbor, and contiguous water bodies are:
 - a. Water contact recreation
 - b. Non-contact water recreation
 - c. Wildlife Habitat
 - d. Preservation of Rare and Endangered Species
 - e. Estuarine Habitat
 - f. Fish migration and spawning
 - g. Industrial service supply
 - h. Navigation
 - i. Commercial and Sport Fishing

6. Effluent limitations and toxic effluent standards established pursuant to Sections 301, 304, and 307 of the Federal Water Pollution Control Act and amendments thereto are applicable to the discharge.
7. The Basin Plan prohibits the discharge of any wastewater which has particular characteristic of concern to beneficial uses at any point at which the wastewater does not receive a minimum initial dilution of 10:1, or into any nontidal water or dead-end slough or similar confined waters, or its immediate tributaries.
8. The Basin Plan provides that exceptions to the discharge prohibition noted in Finding 7 above will be considered for discharges where:
 - a. an inordinate burden would be placed on the discharger relative to beneficial uses protected and an equivalent level of environmental protection can be achieved by alternate means, such as an alternative discharge site, or higher level of treatment, and/or improved treatment reliability; or
 - b. a discharge is approved as part of a reclamation project; or
 - c. it can be demonstrated that net environmental benefits will be derived as a result of the discharge.
9. The Board grants an exception to the Basin Plan prohibition noted in Finding 7 above, on the condition that the discharger documents compliance with Finding 8 to the satisfaction of the Executive Officer.
10. Effluent limitations guidelines requiring the application of best available technology economically achievable (BAT) for this point source category have not been promulgated by the U.S. Environmental Protection Agency (EPA). Effluent limitations of this order are based on the Basin Plan, other state plans and policies, and best professional judgement. The limitations are considered to be those attainable by BAT, in the judgement of the Board.
11. Under 40 CFR 122.44, "Establishing Limitations, Standards, and Other Permit Conditions," NPDES permits should also include toxic pollutant limitations if the discharger uses or manufactures a toxic pollutant as an intermediate or final product or byproduct. This permit may be modified prior to the expiration date, pursuant to 40 CFR 122.62 and 124.5, to include effluent limitations for toxic constituents determined to be present in significant amounts

in the discharge.

12. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
13. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions

1. The discharge of all conservative toxic and deleterious substances above those levels which can be achieved by a program acceptable to the Board is prohibited.

B. Effluent Limitations

1. The discharge containing a daily average of oil and grease in excess of 30 mg/l is prohibited. Daily average concentration limit for oil and grease shall be deemed exceeded if the analyses of any two representative grab samples taken at least six hours apart each individually exceed 30 mg/l.
2. The pH of the discharge shall not exceed 8.5 nor be less than 6.5.
3. The discharge shall meet the following limit of toxicity:

The survival of three-spine stickleback and rainbow trout (or fathead minnow) in a 96-hour static renewal bioassay of the effluent as discharged shall achieve a median of 90% survival for three consecutive samples and a 90 percentile value of not less than 70% survival for ten consecutive samples.

4. The discharge containing constituents in excess of the following limits is prohibited after July 20, 1990:

<u>Constituent</u>	<u>Units</u>	<u>Averages</u>		<u>Daily Max</u>
		<u>30-day</u>	<u>7-day</u>	
a. Total Suspended Solids	mg/l	30	45	-
b. Oil & Grease	mg/l	10	-	20
c. Settleable Matter	ml/l-hr	0.1	-	0.2
d. Arsenic	ug/l			20
e. Cadmium	ug/l			10
f. Total Chromium	ug/l			11
g. Copper	ug/l			20
h. Lead	ug/l			5.6
i. Mercury	ug/l			1
j. Nickel	ug/l			7.1
k. Silver	ug/l			2.3
l. Zinc	ug/l			58

5. After July 20, 1990 the discharge shall not contain a Volatile Organic Compound (VOC) exceeding a daily max of 5 ug/l and Total Volatile Organic Compounds (VOCs) exceeding a daily max of 100 ug/l as measured by EPA Methods 601 and 602.
6. After July 20, 1990 the discharge shall not contain Total Petroleum Hydrocarbons (TPHs) exceeding a daily max of 50 ug/l as measured by Modified EPA Method 8015.

C. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the state at any place:
- a. Floating, suspended, or deposited macroscopic particulate matter or foam;
 - b. Bottom deposits or aquatic growths;
 - c. Alteration of turbidity or apparent color beyond present natural background levels;

- d. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - e. Toxic or other deleterious substances to be present in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentrations.
2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
- a. Dissolved oxygen: 5.0 mg/l minimum. The median dissolved oxygen concentration for any three consecutive months shall not be less than 80 percent of the dissolved oxygen content at saturation.
 - b. Dissolved sulfide: 0.1 mg/l maximum.
 - c. pH: The pH shall not be depressed below 6.5 nor above 8.5, nor caused to vary from ambient pH levels by more than 0.5 units.
 - d. Un-ionized Ammonia
(as N): 0.025 mg/l Annual Median
0.16 mg/l Maximum at any time
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

D. Provisions

- 1. Neither the treatment nor the discharge of pollutants shall create a nuisance or pollution as defined in Section 13050 of the California Water Code.
- 2. If the discharger is interested in pursuing an exception to the discharge prohibition outlined in Finding 7 of this Order, the discharger shall demonstrate compliance with Finding 8 of

this Order in accordance with the following time schedule:

- a. Submit a report including the following documentation by November 20, 1989:
 1. The costs of construction of a deep water outfall, and the cost of connection to the local sanitary sewer.
 2. The sources of pollutants, treatment technologies and costs for compliance with effluent limitations.
 3. Assurance that the discharge will comply with effluent limitations prior to discharge.
 - b. Submit by December 20, 1989 a Best Management Practice Plan (BMP) consistent with the EPA regulations 40 CFR 125, Subpart K and the general guidance contained in the " NPDES Best Management Guidance Document", EPA Report No. 600/9-79-045, December 1979 (revised June 1981). The BMP shall specifically address segregation of non-contaminated stormwater from contaminated areas. A BMP program acceptable to the Executive Officer shall be implemented by May 20, 1990.
3. The discharger shall comply with the attached Self-Monitoring Program as adopted by the Board.
 4. The discharger shall comply with all items of the attached "Standard Provisions and Reporting Requirements" dated December 1986.
 5. The discharger shall review and update by November 1 each year its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the Discharger has failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
 6. All applications, reports, or information submitted to the Regional Board shall be signed and certified pursuant to Environmental Protection Agency regulations (40 CFR 122.41K).
 7. Pursuant to Environmental Protection Agency regulations [40CFR122.42(a)] the discharger must notify the Board as soon as it knows or has reason to believe (1) that they have begun or expect to begin, use or manufacture a toxic pollutant not reported in the permit application, or (2) a discharge of a toxic pollutant not limited by this permit has occurred, or will occur, in concentrations that exceed the specified limits in 40 CFR 122.42(a).

8. This permit shall be modified or alternatively revoked and reissued to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(c), and (d), 303, 304(b)(2), and 307(a)(2) of the Clean Water Act, if the effluent standard or limitation so issued or approved:

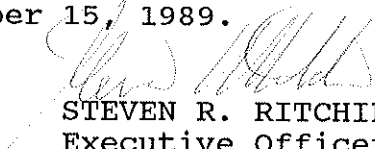
- (a) Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or,
- (b) Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of the Act then applicable.

9. This Order expires on October 18, 1994 and the discharger must file a Report of Waste Discharge in accordance with Title 23, California Administrative Code, not later than 180 days in advance of such date as application for issuance of new waste discharge requirements.

10. This Order shall serve as a National Pollutant Discharge Elimination pursuant to Section 402 of the Federal Water Pollution Control Act, or amendments thereto, and shall take effect at the end of ten days from date of hearing, provided the Regional Administration, U.S. Environmental Protection Agency, has no objections.

I, Steven R. Ritchie, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on November 15, 1989.

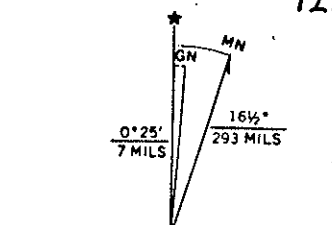

STEVEN R. RITCHIE
Executive Officer

Attachments:

Location Map
Standard Provisions and Reporting Requirements dated December
1986
Resolution No. 74-10
Self-Monitoring Program

TIME
OIL COMPANY

EXIST. STORM
WATER DISCHARGE
WITH OIL/WATER
SEPARATOR



UTM GRID AND 1980 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

RICHMOND, CALIF.

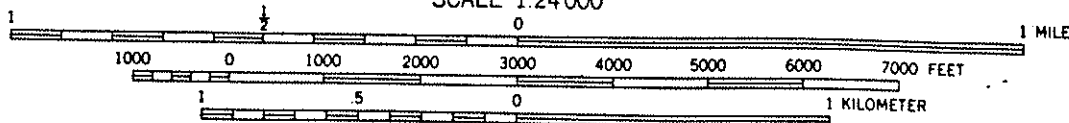
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DMA 1559 IV NE—SERIES V895

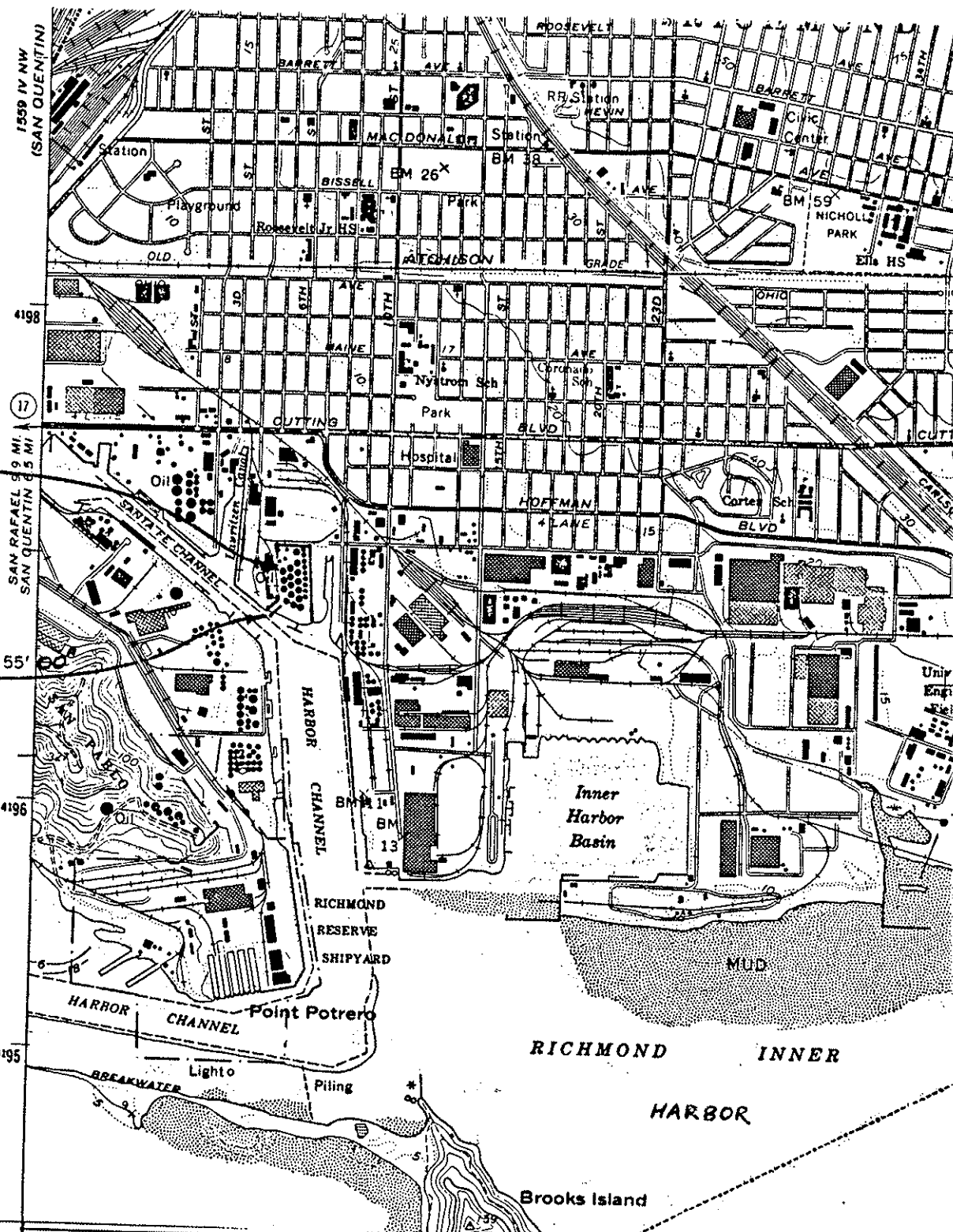
122° 22' 30"

SCALE 1:24 000



CONTOUR INTERVAL 20 FEET
DOTTED LINES REPRESENT 5-FOOT CONTOURS
NATIONAL GEODETIC VERTICAL DATUM OF 1929
DEPTH CURVES IN FEET—DATUM IS MEAN LOWER LOW WATER
THE RELATIONSHIP BETWEEN THE TWO DATUMS IS VARIABLE
SHORELINE SHOWN REPRESENTS THE APPROXIMATE LINE OF HIGH WATER
THE MEAN RANGE OF TIDE IS APPROXIMATELY 4 FEET

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U.S. GEOLOGICAL SURVEY, DENVER, COLORADO 80225, OR RESTON, VIRGINIA 22092
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM

FOR

TIME OIL COMPANY

RICHMOND TERMINAL

RICHMOND, CONTRA COSTA COUNTY

NPDES NO. CA0027723

ORDER NO.89-172

CONSISTS OF

PART A (DATED 12/86)

AND

PART B

SELF-MONITORING PROGRAM

PART B

DESCRIPTION OF SAMPLING STATIONS
AND
SCHEDULE OF SAMPLING, ANALYSIS & OBSERVATIONS

I. Sampling Station Location/Description

A. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the outfall from the plant facilities between the point of discharge to Sante Fe Channel and the point at which <u>all</u> wastes tributary to that outfall are present.

II. Schedule of Sampling, Analysis & Observations

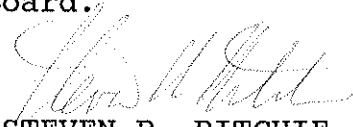
- A. The schedule of sampling and analysis shall be that given in Table 1 (attached).
- B. Sample collection, storage, and analysis shall be performed according to the latest 40 CFR Part 136 or other methods approved and specified by the Board.

III. Miscellaneous Reporting

- A. The discharger shall retain and submit (when required) the following information concerning the monitoring program for organic and metallic pollutants.
 - 1. Description of sample stations, times, and procedures.
 - 2. Description of sample containers, storage, and holding time prior to analysis.
 - 3. Quality assurance procedures together with any test results for replicate samples, sample blanks, and any quality assurance tests, and the recovery percentages for the internal and surrogate standards.

I, Steven R. Ritchie, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established by this Board.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger and revisions may be ordered by the Executive Officer or Regional Board.


STEVEN R. RITCHIE
Executive Officer

11/15/89
Effective Date

Attachments:
Table 1

TABLE I

SCHEDULE OF SAMPLING, MEASUREMENTS, AND ANALYSIS

<u>Station</u>	<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Frequency of Analysis</u>
E-001	Flow	gpd	continuous	continuous
	Oil & Grease	mg/l kg/day	grab	weekly (1)
	Toxicity	% survival	(2)	monthly
	pH	pH units	grab	weekly
	TSS	mg/l	24-hour- composite	weekly
	Settleable Solids	ml/l-hr	grab	monthly
	Arsenic	ug/l	24-hour	monthly
	Cadmium	kg/day	composite	
	Chromium			
	Copper			
	Silver			
	Lead			
	Mercury			
	Nickel			
	Zinc			

FOOTNOTE

- 1) Oil & Grease sampling shall consist of 2 grab samples taken at 6-hour intervals during the sampling day, with each grab being collected in a glass container.
- 2) The bioassay test shall be a static-renewal test using two test fish species (stickleback, and rainbow trout or fathead minnow).

<u>Station</u>	<u>Constituent</u>	<u>Unit</u>	<u>Type of Sample</u>	<u>Frequency of Analysis</u>
E-001	Volatile Organic Compounds (As measured by EPA Methods 601 and 602)	ug/l	grab	monthly
	Volatile Organic Compounds (As measured by EPA Method 624)	ug/l	grab	yearly
	Total Petroleum Hydrocarbons (As measured by EPA Method 8015)	ug/l	grab	monthly

LEGEND

FREQUENCY OF ANALYSIS

Continuous = continuous measurement during discharge. The flow rate should be reported on a daily basis in the self-monitoring report.

Weekly = once each calender week if a discharge occurred that week

Monthly = once each calender month if a discharge occurred that month

Yearly = once each calender year if a discharge occurred that year